

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 18 with the following rewritten paragraph:

For example, in an image display apparatus such as a projector for projecting an image on a screen, when an image is displayed on a screen, a phenomenon that an image displayed on the screen is non-linearly distorted by the screen or by an optical mechanism limit is generated. Also, in an image display apparatus based on a general brown tube, an image distortion is not generated at the center of the brown tube by a screen of a curved surface but an image distortion is generated in an edge direction of the brown tube. According to this, the image display apparatus reverse-converts the distorted image into the original image in an additional format conversion process block for compensating a partial distortion of the image. According to this, an actual image displayed on the screen is normally realized without a distortion, so that the user can see an image with in an optimum state.

Please replace the paragraph beginning on page 2, line 5 with the following rewritten paragraph:

The image display apparatus outputs image data non-linearly when an image is to be displayed on the screen thus to display the original image on the screen without a distortion. Functions for non-linearly processing image data include a tilt function, a pincushion function, a keystone function, and etc., which is called are also known as a warping function. In order to implement the warping function, the image data has to be accessed to an external memory in a vertical direction or a horizontal direction.

Please replace the paragraph beginning on page 2, line 12, with the following rewritten paragraph:

However, in the conventional memory access control apparatus, the warping function is performed by storing the image data in an external memory in a horizontal direction by a raster scan method and then reading the stored image data in a horizontal direction. Therefore, in the conventional memory access control apparatus, a memory access latency becomes very great thus not to be able ~~hindering the abiding~~ to smoothly read image data from the external memory, thereby lowering a the stability of the entire system. Hereinafter, a process for storing image data in the external memory in accordance with the conventional art will be explained with reference to Figure 1.

Please replace the paragraph beginning on page 7, line 8, with the following rewritten paragraph:

For example, in the external memory for storing the image data, first image data of 8 bytes of the image lines is sequentially stored in the first column in the Nth bank of the Nth row in a vertical direction, and second image data of 8 bytes of the image lines is sequentially stored in the second column also in a the vertical direction. By repeating said the process, 960 pixels, a half of 1920 pixels of said each image line having the word per bank of 32 and the unit line of 8 are stored in the 0th, 1st, 2nd, and 3rd banks of the 0th row inside the external memory. Also, the ~~rest~~ remaining 960 pixels, a half of 1920 pixels of said the each image line having the word per bank of 32 and the unit line of 8 are stored in the 0th, 1st, 2nd, and 3rd banks of the 1st row inside the external memory.

Please replace the paragraph beginning on page 8, line 8, with the following rewritten paragraph:

As shown, 8 bytes including R, G, and B components, that is, one word unit is stored in the memory structure. In case that image data of the R, G, and B components is stored in the memory structure, a garbage region that is not used may be generated in the Nth bank of the Nth row. However, said the problem can be solved by consecutively arranging image data of the R, G, and B components.

Please replace the paragraph beginning on page 9, line 5, with the following rewritten paragraph:

Herein, the vertical line denotes the number of lines inside the memory where said one image frame is stored.

Please replace the paragraph beginning on page 9, line 9, with the following rewritten paragraph:

As shown, the memory access control apparatus according to an embodiment of the present invention ~~comprises~~: includes a format conversion unit 10 for converting image data into a corresponding format for performing a warping function; a control unit 21 for storing the image data in a memory by a two-dimensional array method according to values of a row, a bank, and a column inside the memory where the image data is to be stored calculated on the basis of coordinate values of the converted image data and predetermined data; and a storing unit 22 for storing the predetermined data. Herein, the predetermined data preferably includes a word per bank, a row per unit line, an offset, and a base row value. The base row denotes a start row address of one frame or one field.